AMENDMENTS TO CLAIMS

- This listing of Claims shall replace all prior versions, and listings, of Claims in the application:

1. (Currently Amended) An apparatus ~~for vapor depositing a uniform thickness thin film of a lubricant on at least one surface of a disk-shaped substrate,~~ comprising,

~~(a) a chamber having an interior space;~~

~~(b) a substrate loader/unloader for supplying said interior space with at least one disk-shaped substrate and for withdrawing at least one disk-shaped substrate from said interior space, said disk-shaped substrate comprising a magnetic or magneto-optical data/information storage and retrieval medium;~~

~~(c)~~ at least one an elongated lubricant vapor source ~~for supplying said interior space with a stream of lubricant vapor, the at least one elongated lubricant vapor source~~ comprising a ~~closed heated~~ chamber fluidly communicating with at least a plurality of primary plugs having an interior for supplying ~~a stream of~~ lubricant vapor, wherein each of ~~said~~ the plurality of primary plugs comprises a drilled hole and two openings~~, said drilled hole substantially extending the length of the interior of each primary plug~~ for transporting the ~~stream of~~ lubricant vapor; and

~~(d) a substrate transporter/conveyer for continuously moving at least one disk-shaped substrate past said stream of lubricant vapor from at least one lubricant vapor source for depositing on at least one surface thereof a uniform thickness thin film of lubricant,~~

~~wherein said~~ the lubricant vapor source ~~(c)~~ comprises a plurality of threaded holes~~, positioned in a direction parallel to said drilled hole,~~ into which the plurality of primary plugs are screwed therein.

2. (Currently Amended) The apparatus according to claim 1, further comprising a chamber having an interior space wherein ~~said chamber (a)~~ the chamber is adapted for maintaining ~~said~~ the interior space at a pressure below atmospheric pressure.

3. (Currently Amended) The apparatus according to claim 1, further comprising a substrate loader/unloader wherein ~~said substrate loader/unloader (b)~~ the substrate loader/unloader is adapted for providing cooling/condensation of ~~said~~ the lubricant vapor for preventing escape of ~~said~~ the lubricant vapor from ~~said~~ an interior space of ~~said~~ a chamber.

4. (Currently Amended) The apparatus according to ~~claim 1~~ claim 3, wherein ~~said substrate loader/unloader (b)~~ the substrate loader/unloader is adapted for supplying and withdrawing at least one disc-shaped substrate having a pair of opposed surfaces and ~~said substrate transporter/conveyor (d)~~ the substrate loader/unloader is adapted for mounting or gripping at least one disc-shaped substrate.

5. (Currently Amended) The apparatus according to claim 4, wherein ~~said at least one lubricant vapor source (c) is elongated, with~~ the elongated lubricant vapor source has a length greater than an outer diameter of ~~said~~ the disc-shaped substrate.

6. (Currently Amended) The apparatus according to ~~claim 5~~ claim 1, wherein ~~said elongated lubricant vapor source (c)~~ the elongated lubricant vapor source comprises a closed heated chamber for accommodating liquid lubricant therein and serving as a lubricant vaporizer, ~~said~~ the closed heated chamber fluidly communicating with at least ~~a~~ the plurality of primary plugs for supplying ~~said~~ a stream of lubricant vapor.

7. (Currently Amended) The apparatus according to claim 6, wherein ~~said elongated vapor source (c)~~ the elongated lubricant vapor source further comprises a plurality of secondary plugs for increased collimation of ~~said~~ the stream of lubricant vapor.

8. (Currently Amended) The apparatus according to claim 6, further comprising a spaced-apart plurality of ~~said elongated lubricant vapor sources (c)~~ the elongated lubricant vapor sources arranged along a path of transport/conveyance of ~~said at least one~~ a disc-shaped substrate within ~~said interior space of said~~ the closed heated chamber.

Claims 9-12 (Canceled)

13. (Currently Amended) The apparatus according to ~~claim 8,~~ claim 1 further comprising:

~~wherein said chamber (a)~~ a closed heated chamber fluidly communicating with at least the plurality of primary plugs, wherein the closed heated chamber is cylindrically-shaped with circularly-shaped upper and lower ~~ends; said~~ ends,

a substrate loader/unloader ~~(b) comprises~~ comprising at least one combined substrate load/unload station on one of ~~said~~ the upper and lower ends; and

~~said~~ wherein the ~~spaced apart plurality of~~ lubricant vapor ~~sources (c)~~ source further comprises a first plurality of radially extending, elongated lubricant vapor sources for depositing a thin film of lubricant on ~~a first one of said pair of opposed surfaces of said~~ a first surface of a disc-shaped substrate; and ~~said~~

a substrate transporter/conveyor ~~(d)~~ that is adapted to move ~~said at least one~~ the disc-shaped substrate in a circular path past each of ~~said first plurality of radially extending, elongated lubricant vapor sources.~~ the primary plugs.

14. (Currently Amended) The apparatus according to claim 13, wherein ~~said spaced apart~~ the first plurality of radially extending, elongated lubricant vapor sources ~~(c)~~ further comprises a second plurality of radially extending, elongated lubricant vapor sources for depositing a thin film of lubricant on a second ~~one of said pair of opposed surfaces of said~~ surface of the disc-shaped substrate.

15. (Currently Amended) The apparatus according to ~~claim 8,~~ claim 1 further comprising:

~~wherein said chamber (a) is~~ an elongated, rectangular box-shaped chamber having a pair of longitudinally extending front and rear ~~walls;~~ walls,

~~said~~ a substrate loader/unloader ~~(b) comprises~~ comprising a substrate load lock chamber connected to ~~said~~ the elongated, rectangular box-shaped chamber at a first end of ~~said~~ the front wall and a substrate exit lock chamber connected to ~~said~~ the elongated, rectangular box-shaped chamber at a second end of ~~said~~ the front ~~wall;~~ wall,

~~each of said spaced apart plurality of elongated~~ wherein the lubricant vapor ~~sources (c) extends~~ source further comprises a plurality of transversely extending, elongated lubricant vapor sources that extend transversely across ~~said~~ the front wall in ~~the~~ a space between ~~said~~ the load lock chamber and ~~said~~ the exit ~~chambers;~~ lock chamber, and

~~said~~ a substrate transporter/conveyor ~~(d)~~ that is adapted to move ~~said at least one~~ a disc-shaped substrate in a linear path past each of the transversely extending, elongated lubricant vapor sources.

16. (Withdrawn) A method of vapor depositing a uniform thickness thin film of lubricant on at least one surface of a disk-shaped substrate, comprising the steps of:

(a) providing an apparatus comprising:

(i) a chamber having an interior space maintained below atmospheric pressure;

(ii) a substrate loader/unloader for supplying said interior space with at least one disk-shaped substrate and for withdrawing at least one disk-shaped substrate from said interior space, said disk-shaped substrate comprising a magnetic or magneto optical data/information storage and retrieval medium;

(iii) at least one lubricant vapor source for supplying said interior space with a stream of lubricant vapor, said vapor source comprising a closed heated chamber fluidly communicating with at least a plurality of primary plugs for supplying a stream of lubricant vapor; and

(iv) a substrate transporter/conveyor for continuously moving at least one substrate past said stream of vapor from said at least one lubricant vapor source;

(b) supplying said interior space with a substrate having at least one surface;

(c) continuously moving said substrate past said stream of lubricant vapor and depositing a uniform thickness thin film of said lubricant on said at least one surface; and

(d) withdrawing the lubricant-coated disk-shaped substrate from said interior space.

17. (Withdrawn) The method as in claim 16, wherein:

step (b) comprises supplying a disc-shaped substrate having a pair of opposed surfaces.

18. (Withdrawn) The method as in claim 17, wherein:

step (b) comprises supplying a disc-shaped substrate having a laminate of layers for a magnetic or magneto-optical (MO) data/information storage and retrieval medium formed on at least one of said pair of opposed surfaces.

19. (Withdrawn) The method as in claim 18, wherein:

step (c) comprises vapor depositing a thin film of a polymeric fluorine-containing lubricant on said laminate of layers on at least one of said pair of opposed surfaces.

20. (Withdrawn) The method as in claim 17, wherein:

step (a)(iii) comprises providing an apparatus with at least one elongated lubricant vapor source having a length greater than an outer diameter of said disc-shaped substrate, said at least one elongated lubricant vapor source comprising a closed heated chamber for accommodating liquid lubricant therein and serving as a lubricant vaporizer, said closed heated chamber fluidly communicating with a plurality of primary plugs for supplying said stream of lubricant vapor.

21. (Withdrawn) The method as in claim 20, wherein:

step (a) comprises providing an apparatus wherein said chamber (i) is in the form of a cylinder with circularly-shaped upper and lower ends; said substrate loader/unloader (ii) comprises at least one combined substrate load/unload station on one of said upper and lower ends; said at least one elongated lubricant vapor source (iii) comprises a first plurality of spaced-apart, radially extending, elongated lubricant vapor sources for depositing a thin film of lubricant on a first one of said pair of opposed surfaces of said disc-shaped substrate; and said substrate transporter/conveyor (iv) is adapted to move said at least one disc-shaped substrate in a circular path past each of said first plurality of spaced-apart, radially extending, elongated lubricant vapor sources.

22. (Withdrawn) The method as in claim 21, wherein said at least one elongated lubricant vapor source (iii) further comprises a second plurality of spaced-apart, radially extending,

elongated lubricant vapor sources for depositing a thin film of lubricant on a second one of said pair of opposed surfaces of said disc-shaped substrate.

23. (Withdrawn) The method as in claim 20, wherein step (a) comprises providing an apparatus wherein said chamber (i) is in the form of an elongated, rectangularly-shaped box having a pair of longitudinally extending front and rear walls; said substrate loader/unloader (ii) comprises a substrate load lock chamber connected to said chamber at a first end of said front wall and a substrate exit lock chamber connected to said chamber at a second end of said front wall; said at least one elongated lubricant vapor source (iii) comprises a plurality of spaced-apart, elongated lubricant vapor sources transversely extending across said front wall in the space between said load lock and said exit chambers; and said substrate transporter/conveyor (iv) is adapted to move said at least one disc-shaped substrate in a linear path past each of the plurality of spaced-apart, transversely extending, elongated lubricant vapor sources.

Claims 24-27 (Canceled)

28. (Previously Presented) The apparatus according to claim 1, wherein the plurality of primary plugs form a pattern in the form of a linear array, a diagonal array, or a rectangular array.

29. (Currently Amended) The apparatus according to claim 1,wherein the plurality of primary plugs positioned at the outer edges of ~~at least one elongated~~ the lubricant vapor source have a smaller diameter drilled hole than the plurality of primary plugs positioned adjacent to the middle of ~~at least one elongated~~ the lubricant vapor source.